WHAT IS CLAIMED IS:

1. A method of removing antibodies specific for B7-H1 from a body fluid of a subject, the method comprising :

(a) withdrawing a body fluid from a subject, wherein the body fluid comprises one or more antibodies that bind to B7-H1;

(b) removing from the body fluid a substantial portion of the one or more antibodies; and

(c) returning the body fluid to the subject.

2. The method of claim 1, wherein the body fluid is blood plasma.

3. The method of claim 1, wherein the subject is suspected of having a disease or pathological condition, or is likely to develop a disease or pathological condition, with symptoms that are caused directly, or indirectly, by activated T cells.

4. The method of claim 3, wherein the disease is an autoimmune disease.

5. The method of claim 4, wherein the autoimmune disease is rheumatoid arthritis.

6. The method of claim 4, wherein the autoimmune disease is systemic lupus erythematosus.

7. The method of claim 4, wherein the autoimmune disease is autoimmune hearing loss.

8. The method of claim 1, wherein the removal comprises contacting the body fluid with a B7-H1 reagent.

9. The method of claim 8, wherein B7-H1 reagent is bound to a solid support.

10. The method of claim 2, wherein prior to the removal step, the blood plasma is separated from blood cells.

11. A method of treatment comprising:

(a) identifying a subject as having an elevated level in a body fluid of one or more B7-H1-specific antibodies; and

(b) administering to the subject one or more compounds that inhibit the binding of B7-H1 to one or more B7-H1-specific antibodies.

12. The method of claim 11, wherein the body fluid is blood.

13. The method of claim 11, wherein the subject is suspected of having a disease or pathological condition, or is likely to develop a disease or pathological condition, with symptoms that are caused directly, or indirectly, by activated T cells.

14. The method of claim 13, wherein the disease is an autoimmune disease.

15. The method of claim 14, wherein the autoimmune disease is rheumatoid arthritis.

16. The method of claim 14, wherein the autoimmune disease is systemic lupus erythematosus.

17. The method of claim 14, wherein the autoimmune disease is autoimmune hearing loss.

18. The method of claim 11, wherein the compound comprises B7-H1 or a fragment of B7-H1.

19. A method of diagnosis, comprising:

(a) identifying a subject that is suspected of having, or is likely to develop, a disease or pathological condition with symptoms that are caused directly, or indirectly, by activated T cells;

(b) obtaining a sample of body fluid from the subject; and

(c) detecting one or more B7-H1-specific antibodies in the sample,

wherein an elevated level of one more B7-H1-specific antibodies in the sample is an indication that the subject has, or is likely to develop, a disease or pathological condition with symptoms that are caused directly, or indirectly, by activated T cells.

20. The method of claim 19, wherein the disease is an autoimmune disease.

21. The method of claim 20, wherein the autoimmune disease is rheumatoid arthritis.

22. The method of claim 20, wherein the autoimmune disease is systemic lupus erythematosus.

23. The method of claim 20, wherein the autoimmune disease is autoimmune hearing loss.

24. The method of claim 19, wherein the body fluid is blood.

25. A method of monitoring the progress of a disease, the method comprising:

(a) identifying a subject that is suspected of having a disease or pathological condition, or is likely to develop a disease or pathological condition, with symptoms that are caused directly, or indirectly, by activated T cells.;

(b) obtaining a sample of a body fluid from the subject; and

(c) measuring the level of one or more B7-H1-specific antibodies in the sample,

wherein the level of one or more B7-H1-specific antibodies in the sample correlates with the stage of the disease or pathological condition.

26. The method of claim 25, further comprising repeating steps (b) and (c) one or more times.

27. The method of claim 25, wherein the disease is an autoimmune disease.

28. The method of claim 27, wherein the autoimmune disease is rheumatoid arthritis.

29. The method of claim 27, wherein the autoimmune disease is systemic lupus erythematosus.

30. The method of claim 27, wherein the autoimmune disease is autoimmune hearing loss.

31. The method of claim 25, wherein the body fluid is blood.

32. A method of identifying a compound that inhibits binding of B7-H1 to an antibody that binds to B7-H1, the method comprising contacting B7-H1 with the antibody in the presence of the compound and testing for inhibition by the compound of binding of B7-H1 to the antibody.

33. A method of designing a compound that inhibits the binding of B7-H1 to an antibody that binds to B7-H1, the method comprising analyzing the three dimensional structure of B7-H1, or a fragment of B7-H1, and designing a compound with a three-dimensional structure that corresponds to an external portion of B7-H1, wherein the compound binds to an antibody that binds to B7-H1.

34. A method of inhibiting expression of B7-H1 in a T cell, the method comprising introducing into the T cell: (a) an antisense oligonucleotide that hybridizes to a B7-H1 transcript, wherein the antisense oligonucletide inhibits expression of B7-H1 in the cell; or (2) a B7-H1 interference RNA (RNAi).

35. The method of claim 34, wherein the introducing step comprises administration of the antisense oligonucleotide or the RNAi to the cell and uptake of the antisense oligonucleotide or the RNAi by the cell.

36. The method of claim 34, wherein the introducing step comprises administering to the cell a nucleic acid comprising a transcriptional regulatory element (TRE) operably linked to a nucleotide sequence complementary to the antisense oligonucleotide, wherein transcription of the nucleotide sequence inside the cell produces the antisense oligonucleotide.

37. The method of claim 34, wherein the introducing step comprises administering to the T cell a nucleic acid: (a) from which sense and anti-sense strands of the RNAi can be transcribed under the direction of separate TREs; or (b) from which both sense and anti-sense strands of the RNAi can be transcribed under the direction of a single TRE.

38. The method of claim 34, wherein the T cell is in a mammal.

39. The method of claim 38, wherein the mammal is a human.